This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented): A self expandable stent comprising:

an elastic tubular lattice structure having a first end zone, a second end zone, a longitudinal direction and a radial direction, the lattice structure defining an outer diameter and an inner lumen and being formed by wall segments, which wall segments branch off at intersections, the stent being elastically expandable from a compressed, reduced diameter delivery configuration toward a relaxed, resiliently expanded configuration

the lattice structure being interrupted at least at some of the intersections so as to increase the flexibility of the stent,

the wall segments at least at the interrupted intersections, being pre-formed to have a relaxed, undeformed and resiliently expanded state in which they project radially outward such that, upon curvature of the expanded stent along the longitudinal direction, a reduction of the inner lumen due to the wall segments at the interrupted intersections is prevented,

the stent, including the radially expandable wall segments at the interrupted intersections, being compressible to a reduced diameter containable in a delivery device such that the stent, including the radially projectable wall segments, are resiliently contained such that upon release from the delivery device, the stent will resiliently self-expand to its expanded state and the wall segments will radially self-expand to their outward projecting configuration.

2. (cancelled)

3. (previously presented): A stent in accordance with claim 1, wherein the expansion of the wall segments is formed by an arcuate curvature of these wall segments along the longitudinal direction.

4. (previously presented): A stent in accordance with claim 1 or 2, wherein the wall segments are interrupted in regular distribution over the stent at substantially two thirds of all the intersections.

5. (previously presented): A stent in accordance with claim 1, wherein the lattice structure has apertures having an aperture width of maximally 9 mm when the stent is expanded.

6. (previously presented): A stent in accordance with claim 1, wherein the wall segments have a width between 0.12 mm and 0.17 mm.

7. (previously presented): A stent in accordance with claim 1, wherein the lattice structure has substantially a wall thickness of between 0.2 mm and 0.3 mm.

8. (previously presented): A stent in accordance with at least one of claims 1-7, wherein the stent consists of a metallic material.

9. (previously presented): A stent in accordance with claim 8, wherein the metallic material consists of a shape memory alloy.

10. (original): A stent in accordance with claim 9, wherein the metallic material consists of an alloy which contains nickel and titanium.

11. (original): A stent in accordance with claim 10, wherein the alloy of the stent has the following alloy moieties:

- nickel: 54.5 to 57 mass percent,
  titanium: 43 to 45.5 mass percent.

12. (withdrawn): A production process for a stent, comprising the following steps:

- providing a tubular element with an external diameter, and inner lumen, a first end zone and a second end zone;
- slotting the tubular element into a lattice structure, the lattice structure being formed by wall segments, which wall segments branch off at intersections;
- interrupting at least some of the intersections at selected positions, so as to increase the flexibility of the stent;
- expanding the wall segments at least at the interrupted intersections in the radial direction such that, upon curvature of the stent along the longitudinal direction, a reduction of the inner lumen due to the wall segments at the interrupted intersections is prevented.

13. (withdrawn): A process in accordance with claim 12, wherein the step of expanding comprises expanding the wall segments in the radial direction in the first and second end zones.

14-18 (cancelled)

19. (withdrawn): A process in accordance with claim 12, wherein interrupting the intersections takes place in the step of slotting.

20. (withdrawn): A process in accordance with claim 12, wherein the steps of slotting are carried out by laser cutting.

21. (withdrawn): A process in accordance with claim 12, wherein the step of expanding comprises the following partial steps:

placing the stent on a mandrel, the mandrel being designed as a counter-part to the expanded shape of the stent;

heating the stent placed on the mandrel;

cooling the heated stent

removing the stent after cooling from the mandrel.

22. (withdrawn): A process in accordance with claim 21, wherein before the step of removing the cooled stent from the mandrel, a mold element is placed externally over the mandrel and the stent, which element corresponds in its contour to the expanded shape of the stent.

23-26 (cancelled)

27. (previously presented): A combination of an expandable stent and a stent delivery system comprising:

a stent as defined in claim 1 and a stent delivery device for delivering the stent.

28. (previously presented): A combination in accordance with claim 27, wherein the delivery system contains a balloon dilation catheter.

29. (previously presented): A combination in accordance with claim 27, wherein the delivery system is a system in accordance with the Seldinger technique for catheterization of bodily vessels.

30. (currently amended): A ~~process~~ combination in accordance with claim 27, wherein the stent consists of a metallic material made from a shape memory alloy having the following alloy moieties:

- nickel: 54.5 to 57 mass percent,
- titanium: 43 to 45.5 mass percent.

31. (withdrawn): A production process for a stent, comprising the following steps:

providing a tubular element with an external diameter, and inner lumen, a first end zone and a second end zone;

slotting the tubular element into a lattice structure, the lattice structure being formed by wall segments, which wall segments branch off at intersections;

interrupting at least some of the intersections at selected positions, so as to increase the flexibility of the stent;

expanding the wall segments in the radial direction at least at the interrupted intersections and at least one of said first and second end zones such that, upon curvature of the stent along the longitudinal direction, a reduction of the inner lumen due to the wall segments at the interrupted intersections is prevented.

32. (withdrawn): process in accordance with claim 31, wherein the step of expanding includes expanding the wall segments in the radial direction in the first and second end zones.

33. (withdrawn): A process in accordance with claim 31, wherein interrupting the intersections takes place in the step of slotting.

34. (withdrawn): A process in accordance with claim 31, wherein the steps of slotting are carried out by laser cutting.

35. (withdrawn): A process in accordance with claim 31, wherein the step of expanding further comprises:

placing the stent on a mandrel, the mandrel being designed as a counter-part to the expanded shape of the stent;

heating the stent placed on the mandrel;

cooling the heated stent;

removing the stent after cooling from the mandrel.

36. (withdrawn): A process in accordance with claim 35, wherein the step of expanding further comprises:

after cooling the heated stent,

placing a mold element externally over the mandrel and the stent, which element corresponds in its contour to the expanded shape of the stent.

37. (withdrawn): A process in accordance with claim 31, wherein the stent consists of a metallic material made from a shape memory alloy having the following alloy moieties:

- nickel.: 54.5 to 57 mass percent,
- titanium: 43 to 45.5 mass percent.

38. (withdrawn): A process in accordance with claim 12 wherein the tubular element comprises a metallic material.

39. (withdrawn): A process in accordance with claim 38, in which the metallic material is provided with a dislocation threshold temperature, and wherein the step of expanding includes the following partial steps:

placing the stent on a mandrel, the mandrel being designed as a counter-part to the expanded shape of the stent;

heating the stent placed on the mandrel to a temperature above the dislocation threshold temperature;

cooling the heated stent to a temperature below the dislocation threshold temperature;

removing the stent after cooling from the mandrel.

40. (withdrawn): A process in accordance with claim 39, further comprising:

after cooling the heated stent, placing a mold element externally over the mandrel and the stent, which element corresponds in its contour to the expanded shape of the stent.

41. (withdrawn): A process in accordance with claim 38, wherein the metallic material is made from a shape memory alloy having the following alloy moieties:

- nickel: 54.5 to 57 mass percent,
- titanium 43 to 45.5 mass percent.

42. (withdrawn): A process in accordance with claim 38, wherein the process provides in the step of expanding the wall segments or after this step, heat treatment of the stent, so as to achieve a temperature reactive shape memory effect in the zone of the expanded wall segments.

43. (withdrawn): A process in accordance with claim 38, wherein the process further includes between the steps of slotting the tubular element and interrupting the intersections, a step of influencing the structure of the metal lattice of the stent.

44. (withdrawn): A process in accordance with claim 38, wherein the process before the step of interrupting the intersections further includes a step of heat treatment, in order to achieve a temperature reactive shape memory effect in the entire stent region.

45. (withdrawn): A process in accordance with claim 38, wherein the process further includes a final step of polishing the stent.